Methods: We experienced two cases of pathologically proved spinal PVNS. Clinical presentation and imaging studies were reviewed for spinal location, spinal segments affected, intrinsic characteristics on CT and MR imaging.

Results: Both cases are female with 21 and 43 year-old in each. The younger case presented with progressive lower limb weakness caused by spinal cord compression by an expansile osteolytic lesion with epidural mass at T1-T3. A soft tissue mass with bony destruction was found at C1 incidentally on health examination in the other case.

Posterior element involvement with poor determination of facet origin was evident in both cases. However, different intrinsic characteristics were detected on CT and MR images, particularly in different signal intensity on T2-weighted images. Both cases had received surgical excision with good outcome in two-year follow-up.

Conclusion: There are significant different appearances in PVNS of the spine according to the location, size of the lesion, detection of facet origin and changes in signal intensity on MR images resulting from hemosiderin deposition.

POSTER PJ098 ID NO. 165

Spinal Dural Arteriovenous Fistula – Not An Uncommon Disease Entity?

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Spinal dural arteriovenous fistulas are rare lesions and present with non-specific symptoms. A spinal fistula is often not suspected when the patient first presents.

Materials and Methods: We review 4 patients diagnosed with spinal dural arteriovenous fistula between January and June 2006 who were referred to the radiology department for spinal angiography.

Results and Discussion: A total of 4 patients were diagnosed with spinal dural arteriovenous fistula within a short interval between January and June 2006 in SGH. Spinal fistulas may not be a rare condition and could be unrecognized due to non-specific symptoms. The first symptoms of spinal dural arteriovenous fistulas often consist of paraparesis and paraesthesias in the feet or legs as well as progressive gait disturbance. In the initial phase of the disease, physicians often think polyneuropathy is responsible for the symptoms. 2 out of the 4 patients were referred to the orthopaedic surgeons for diagnoses of cervical myelopathy and cord compression. The other 2 patients were referred to neurologists. In middle-aged men who present eith disturbances of gait and who also report impaired voiding or any other symptoms indicating dysfunction of sacral segments, SDAF is one of the first diagnoses that should come to mind.

POSTER PJ099 ID NO. 007

The Role of Radiotherapy on Esthesioneuroblastoma Treatment

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Esthesioneuroblastoma or olfactory neuroblastoma is a malignant neuroendocrine neoplasm of the nasal cavity originating from the epithelial cells of olfactorius. The incidence rate is very low. This neoplasm needs special attention because of aspecific clinical symptoms similar with all nasal cavity tumor either benign or malignant. Delayed diagnoses establishment is common. So far, there is no treatment standard yet because of its rareness, treatment principles are multimodalities approach, consisting of surgery, radiotherapy and chemotherapy. Radiotherapy has an important role in the treatment of esthesioneuroblastoma due to its moderately radioresponsiveness. Radiation technique needs carefulness because of the closeness of the tumor location with the radiosensitive structures like the eyes, optic nerve, optic chiasm and brain stem. This paper presents the role of radiotherapy in the management of esthesioneuroblastoma by reporting the case of 44-year-old man with esthesioneuroblastoma (olfactory neuroblastoma) stage C according to KADISH or equal to stage III (T3 N0 M0) according to TNM system.

POSTER PJ100 ID NO. 015

The Value of Magnetic Resonance Angiography in Evaluation of Head and Neck Pathology: A Pictorial Essay

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Objectives: The aim of this presentation is to highlight the ability of Magnetic resonance angiography (MRA) in the clinical applications of head and neck pathology.

Methods: We present few head and neck lesions with various pathology to illustrate the diagnostic value of MRA along with its influence on therapeutic decisions.

Results: MRA has the ability to delineate both the anatomic relationships between head and neck pathology with normal surrounding structures, the tumor vascularity and the tumor feeding vessel.

Conclusion: MRA provides sufficient information to aid and influence on therapeutic decisions. It is recognized as an alternative modality to conventional angiography due to its non-invasive approach and less time consuming.

POSTER PJ101 ID NO. 024

Thyroid Hemiagenesis with Nodular Goiter

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Thyroid hemiagenesis is a rare congenital anomaly in which one thyroid lobe or lobe and isthmus fail to develop. Most of the patients are diagnosed have an associated thyroidal disease. In this poster presentation, we report a patient with a nodular goiter in right lobe, incidentally associated with hemiagenesis of left lobe and isthmus.

A 42-year-old male patient complained of a mass in the right side of his neck. Examination of the neck revealed an enlarged right thyroid lobe, and no palpable thyroid gland on the left. He was clinically euthyroid and thyroid function tests were normal.

Thyroid scintigraphy with Tc-99m pertechnetate revealed the absence of left lobe and isthmus. Ultrasonography confirmed left lobe and isthmus agenesis. Ultrasongraphy also revealed a hypoechoic nodule in the lower pole of right lobe.

The patient was diagnosed thyroid hemiagenesis with nodular goiter.

POSTER PJ102 ID NO. 028

Organized Hematoma of the Maxillary Sinus: Radiologic-pathologic Correlation

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Organized hematoma of the maxillary sinus is a rare entity, and often reveals slow-growing swollen cheek, recurrent nasal bleeding, nasal obstruction, and gradually worsening local pain. Hence, especially at initial presentation, its clinical course mimics other neoplasms, and the differentiation from maxillary cancer is often difficult. Treatment of organized hematoma is surgical removal; however, a lethal bleeding may occur in some cases. Therefore, to make a correct diagnosis before treatment is essential to rule out other neoplasms as well as successful treatment outcome. To the best of our knowledge, no correlation between imaging studies including dynamic contrast enhanced T1-weighted MR image and histopathological findings has ever been reported.

We reviewed three cases of organized hematoma and correlated CT and MR imaging findings with histopathological findings. Non-enhanced CT revealed expansile homogenous soft tissue mass in the maxillary sinus. In contrast, MR imaging findings revealed heterogenous hyperintensities while coexisting amorphous low signal intensities on T2-weighted image. In addition, dynamic contrast enhanced T1-weighted image showed heterogenous strong enhancement corresponding to T2-weighted highperintensities from early phase, and the enhancement prolonged after the contrast administration.

Gross specimen showed friable, dark red, and thick fibrous portion. Histopathologically, all lesions consisted of old hematoma with hemosiderin pigment, fibrous tissue and vascular proliferation. Contrast-enhanced areas on T1-weighted images corresponded to vascular proliferations within the lesion. These MR imaging findings are characteristic and differ extremely from any other neoplasms of maxillary sinus. In conclusion, MR imaging studies, especially dynamic contrast enhanced T1-weighted image are useful in diagnosis of organized hematoma in the maxillary sinus, and the radiologists may contribute to patient's favorable outcome.